

4/27/82 cm Tm 4/27/82 cm

Rec'd 4-27-82
OH-293-20

U.S. ENVIRONMENTAL PROTECTION AGENCY-HWI Sample Management Office
P.O. Box 818, Alexandria, VA 22313 - 703/683-0885

Sample Number
EO 761

145764

ORGANICS ANALYSIS DATA SHEET - Page 1

OCT 30 1981

CHEMICAL RECOVERY
F6-8104-5

Laboratory Name Mead CompuChem

Case Number C# 628

Lab Sample ID NO. 8050

QC Report No. 49-2,50-2,51-2

Signature of Person Authorized to Release Data: J. J. J. J.

ACID COMPOUNDS		(circle one)	BASE/NEUTRAL COMPOUNDS		(circle one)
		ug/ml			ug/g
88-06-2	2,4,6-trichlorophenol	10U	101-55-3	4-bromophenyl phenyl ether	10U
59-50-7	p-chloro-m-cresol	20U	39638-32-9	bis-(2-chloroisopropyl) ether	10U
95-57-8	2-chlorophenol	10U	111-91-1	bis(2-chloroethoxy)methane	10U
122-83-2	2,4-dichlorophenol	10U	87-68-3	hexachlorobutadiene	10U
105-67-9	2,4-dimethylphenol	10U	77-47-4	hexachlorocyclopentadiene	10U
88-75-5	2-nitrophenol	10U	78-59-1	isophorone	10U
100-02-7	4-nitrophenol	90U	91-20-3	naphthalene	10U
51-88-5	2,4-dinitrophenol	40U	98-95-3	nitrobenzene	10U
534-52-1	4,6 dinitro-o-cresol	20U	NA	N-nitrosodimethylamine	NA
87-86-5	pentachlorophenol	25U	86-30-6	N-nitrosodiphenylamine	10U
108-95-2	phenol	10U	621-64-7	N-nitrosodi-n-propylamine	10U
			117-81-7	bis(2-ethylhexyl)phthalate	10U
			85-68-7	butyl benzyl phthalate	10U
			84-74-2	di-n-butyl phthalate	10U
			117-84-0	di-n-octyl phthalate	10U
			84-66-2	diethyl phthalate	10U
			131-11-3	dimethyl phthalate	10U
			56-55-3	benzo(a)anthracene	10U
			50-33-8	benzo(a)pyrene	10U
			205-99-2	3,4-benzofluoranthene	25U
			207-08-9	benzo(k)fluoranthene	10U
			318-01-9	chrysene	10U
			208-96-8	acenaphthylene	10U
			120-12-7	anthracene	10U
			181-24-2	benzo(ghi)perylene	25U
			86-73-7	fluorene	10U
			85-01-8	phenanthrene	25U
			53-70-3	dibenzo(a,h)anthracene	25U
			183-39-5	indeno(1,2,3-cd)pyrene	25U
			129-00-0	pyrene	25U
83-32-9	acenaphthene	10U			
92-87-5	benzidine	25U			
120-82-1	1,2,4-trichlorobenzene	10U			
118-74-1	hexachlorobenzene	10U			
67-72-1	hexachloroethane	10U			
111-44-4	bis(2-chloroethyl)ether	10U			
91-58-7	2-chloronaphthalene	10U			
95-50-1	1,2-dichlorobenzene	10U			
541-73-1	1,3-dichlorobenzene	10U			
106-46-7	1,4-dichlorobenzene	10U			
91-94-1	3,3'-dichlorobenzidine	10U			
121-14-2	2,4-dinitrotoluene	10U			
606-20-2	2,6-dinitrotoluene	10U			
	1,2-diphenylhydrazine	10U			
122-66-7	(as azobenzene)	10U			
206-44-0	fluoranthene	10U			
7005-72-3	4-chlorophenyl phenyl ether	10U			

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Laboratory Name Mead CompuChemCase Number 628Lab Sample ID NO. 8050QC Report No. 49-2, 50-2, 51-2

	VOLATILES	ug/ml or ug/g (Circle One)
107-02-8	acrolein	10U
107-13-1	acrylonitrile	10U
71-43-2	benzene	1U
56-23-5	carbon tetrachloride	1U
108-90-7	chlorobenzene	1U
107-06-2	1,2-dichloroethane	1U
71-55-6	1,1,1-trichloroethane	4.7
75-34-3	1,1-dichloroethane	1
79-00-5	1,1,2-trichloroethane	1U
79-34-5	1,1,2,2-tetrachloroethane	1U
75-00-3	chloroethane	1U
110-75-8	2-chloroethylvinyl ether	1U
67-66-3	chloroform	1U
75-35-4	1,1-dichloroethene	1U
156-60-5	1,2-trans-dichloroethene	2.4
78-87-5	1,2-dichloropropane	1U
10061-0X-XX	1,3-dichloropropene	1U
100-41-4	ethylbenzene	17 ^A
75-09-2	methylene chloride	58 ^{A,C}
74-87-3	chloromethane	1U
74-83-9	bromomethane	1U
75-25-2	bromoform	1U
75-27-4	dichlorobromomethane	1U
75-69-4	trichlorofluoromethane	1U
75-71-8	dichlorodifluoromethane	1U
124-48-1	chlorodibromomethane	1U
127-18-4	tetrachloroethylene	1.1
108-88-3	toluene	1100 ^A
79-01-6	trichloroethylene	4.9
75-01-4	vinyl chloride	1U

	PESTICIDES	ug/ml or ug/g (Circle One)
309-00-2	aldrin	0.1U
60-57-1	dieldrin	0.1U
57-74-9	chlordane	0.1U
50-29-3	4,4'-DDT	0.1U
72-55-9	4,4'-DDE	0.1U
72-54-8	4,4'-DDD	0.1U
115-29-7	endosulfan I	0.1U
115-29-7	endosulfan II	0.1U
1031-07-8	endosulfan sulfate	0.1U
78-20-8	endrin	0.1U
7421-43-4	endrin aldehyde	0.1U
76-44-8	heptachlor	0.1U
1024-57-3	heptachlor epoxide	0.1U
319-84-6	BHC-Alpha	0.1U
319-85-7	BHC-Beta	0.1U
319-86-8	BHC-Delta	0.1U
58-89-9	BHC-Gama	0.1U
53469-21-9	PCB-1242	0.1U
11097-69-7	PCB-1254	0.1U
11104-28-2	PCB-1221	0.1U
11141-16-5	PCB-1232	0.1U
12672-24-6	PCB-1248	0.1U
11096-82-5	PCB-1260	0.1U
12674-11-2	PCB-1016	0.1U
8001-35-2	toxaphene	0.4U

DIOXINS

1746-01-6	p-dioxin	0.1U
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*Less than 10 ug/l

(pesticides less than, 0.1 ug/l)

A. quantitated from secondary ion
 I. EICP used for confirmation of hit.

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Lab Name: Mead CompuChem

Case No: 628

Lab Sample I.D. No. 9050

QC Report No: 49-2, 50-2, 51-2

Sample Number

E0761

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Conc ($\mu\text{g}/\text{g}$)	(Surrogates only)	
			Spike Added ($\mu\text{g}/\text{g}$)	Recovery %
d-6-Benzene	VOA	11	10	110
d-8-Toluene	VOA	12	10	120
Fluorophenol	A	3	50	6
d-6-Phenol	A	2	50	4
Pentafluorophenol	A	7	50	14
d-5-Nitrobenzene	BN	33	50	66
Fluorobiphenyl	BN	32	50	64

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

- (a) Value - If the result is a value greater than or equal to the detection limit, report the value.
- (b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.
- (c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.
- (d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.
- (e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.
- (f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

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Lab Name: Mead CompuChem Case No. 628Lab Sample I.D. No. 8050QC Report No: 49-2,50-2,51-2

Sample Number

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B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRAC-TION	% Pur.	Est. Conc.
1			BN		
2			BN		
3			BN		
4			BN		
5			BN		
6			BN		
7			BN		
8			BN		
9			BN		
10			BN		
11			ACID		
12			ACID		
13			ACID		
14			ACID		
15			ACID		
16			ACID		
17			ACID		
18			ACID		
19			ACID		
20			ACID		
✓ 21	75-56-9	Oxirane, methyl (probably 2-propanone)	VOA	89%	38 ✓
✓ 22	67-63-0	2-Propanol	VOA	85%	2.1 ✓
✓ 23	109-99-4	furan, tetrahydro	VOA	93%	6.5 ✓
✓ 24	105-31-7	1-Hexan-3-ol	VOA	76%	139 ✓
✓ 25	78-92-2	2-Butanol	VOA	89%	7.7 ✓
✓ 26	108-10-1	2-Pentanone, 4-Methyl	VOA	96%	49 ✓
✓ 27	98-82-8	Benzene, (1-Methylethyl)	VOA	66%	1.29 ✓
✓ 28	109-38-3	Benzene, 1,3-Dimethyl	VOA	92%	61 ✓
✓ 29	109-38-3	Benzene, 1,3-Dimethyl	VOA	43%	45 ✓
30			VOA		

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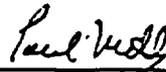
QUALITY CONTROL NOTICE

Low surrogate recoveries of more than one surrogate in a fraction have triggered the following actions:

- a check of the extraction worksheet to determine that the appropriate amount was added;
- a check of recoveries in other samples in the same set.

A repeat analysis is conducted if those checks do not account for low recoveries.

In the medium level acid fractions, surrogates typically have low recoveries. This can be documented from a number of duplicates and repeat analyses conducted on several EPA samples. This low recovery is likely due to the method's solvent system, 15% methylene chloride in hexanes. Independent experiments with similar samples and matrices demonstrate improved acid surrogate recoveries with 100% methylene chloride used for extraction.



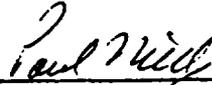
Paul Mills
Quality Assurance Manager

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QUALITY CONTROL NOTICE

The following data reporting qualifiers may be used in this report:

- NDB = The concentration of a priority pollutant in the blank is greater than $\frac{1}{2}$ the detection limit and is greater than $\frac{1}{2}$ the concentration in the sample.
- P = Suspected laboratory contaminant
- O = Concentration in blank is less than or equal to one half the detection limit of the compound; the blank value is ignored.
- C = The concentration in the blank is greater than $\frac{1}{2}$ of the method detection limit and is less than or equal to $\frac{1}{2}$ the concentration detected in a sample; the concentration in the blank is subtracted from the sample.

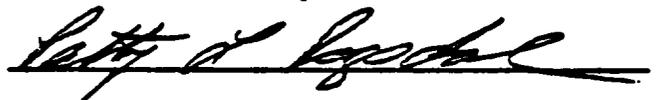


Director, Quality Assurance

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QUALITY CONTROL NOTICE

Internal standard area control charts have been included in this report as required by the contract. Areas outside the stated control limits have triggered an examination of internal standard area ratios (as reported on the Internal Standard Response Verification data sheet), the comparison of raw areas in the affected sample to the corresponding standard, and the comparison of the response factors obtained for the corresponding standard to the initial multipoint calibration data. Corrective action is necessary only if one or more of those checks are outside the established control limits. If no corrective action is noted on the internal standard area control chart, all other factors were within limits and action was not required.



Patty L. Ragsdale
Quality Control Manager